**WARM UP**

1. **A basketball player makes 47% of her shots from the field during the season. Assume she takes only 5 shots per game.**
2. We want to simulate 10 games. Write instructions for this simulation.
3. Using the table of random digits below, conduct 10 trials of this simulation.

|  |  |
| --- | --- |
| shots made | frequency |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |

39634 62349 74088 65564 16379 19713 39153 69459 17986 24537 14595 35050 40469 27478 44526 67331 93365 54526 22356 93208 30734 71571 83722 79712 25775 65178 07763 82928 31131 30196 64628 89126 91254 24090 25752 03091 39411 73146 06089 15630 42831 95113 43511 42082 15140

34733 68076 18292 69486 80468 80583 70361 41047 26792 78466 03395 17635 09697 82447 31405 61220 18721 67387 66575 88378 84299 12193 03785 49314 39761 99132 28775

1. **A different basketball player makes 5 out of every 8 shots she takes. Assume she takes 6 shots per game.**
2. We want to simulate 10 games. Write instructions for this simulation.
3. Using the table of random digits below, conduct 10 trials of this simulation.

|  |  |
| --- | --- |
| shots made | frequency |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |

95836 22530 91785 80210 34361 52228 33869 94332 83868 61672 65358 70469 87149 89509 72176 18103 55169 79954 72002 20582 72249 04037 36192 40221 14918 53437 60571 40995 55006 10694 41692 40581 93050 48734 34652 41577 04631 49184 39295 81776 61885 50796 96822 82002 07973 52925 75467 86013 98072 91942 48917 48129 48624 48248 91465 54898 61220 18721 67387 66575 88378 84299 12193

1. What is the average number of shots made?
2. What is the probability that she makes less than 3 shots?
3. **A different basketball player makes 68% of her shots. We want to see how many shots she has to take (on average) until she makes one.**
4. Write instructions for this simulation
5. Using the table of random digits below, conduct 10 trials of this simulation.

|  |  |
| --- | --- |
| shots taken | frequency |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7+ |  |

80583 70361 41047 26792 78466 03395 17635 09697 82447 31405 00209 90404 99457 72570 42194 49043 24330 14939 09865 45906 30734 71571 83722 79712 25775 65178 07763 82928 31131 30196 02740 03750 07304 96621 10472 03745

96822 82002 07973 52925 75467 86013 98072 91942 48917 48129 48624 48248

1. What is the average number of shots taken?
2. What is the chance she will take more than 4 shots?
3. What is the chance she will take 2 shots or less?

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| 4 |  |
| 5 |  |
| 6 |  |
| 7+ |  |

80583 70361 41047 26792 78466 03395 17635 09697 82447 31405 00209 90404 99457 72570 42194 49043 24330 14939 09865 45906 30734 71571 83722 79712 25775 65178 07763 82928 31131 30196 02740 03750 07304 96621 10472 03745

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